

# Work Order ID 55496

January 19, 2010 1:41:23 PM

Page 1

Item ID: D350-636-013

Accept

Revision ID:

Item Name: Skidtube LH

Start Date: 1/19/10 Start Qty: 1.00

Required Date: 1/25/10 Req'd Qty: 1.00

Reference:

Approvals: Process Plan: *Ref*

Date: 10-1-19

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
----------	--------------

D2750	Rev F
-------	-------

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy blue file and type labels per PPP D350-636-013 CHG 005

*Suber/10*

*for MF 10/02/12*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 55496**

January 19, 2010 1:41:23 PM

Page 2

Item ID: D350-636-013

Accept

Setup Start

Revision ID:

Stop

Item Name: Skidtube LH

Start Date: 1/19/10 Start Qty: 1.00

Cust Item ID:

Required Date: 1/25/10 Req'd Qty: 1.00

Customer:

Reference:

Run Start

Approvals: Process Plan: Date: Tooling: Date:

Stop

QC: Date: SPC (Y/N): Date:

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

110

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1- Mark cut line on aft end of D2600-3-Bent using Jig DT 8150. Cut to length as per Dwg D2750. Deburr end

2-Drill pilot holes as per Dwg D2750 sheet 6 (D2750-3 details).Drill using drill Jig DT8150 &amp; DT8864.

3- Mark fwd end for cutting using Drill Jig DT 8150 &amp; DT8864 and cut as per dwg D2750.

4-Drill pilot holes for the blade fitting bolt holes using DT8983. Open to 0.500".

5- locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting.

6-Open up holes for SECTION AW-AW to 0.375" (2 holes per side) and blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D2750. Open holes for ground handling and detail T to 0.500" (8 holes per side)

7-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 and open to 0.297"

8-Open up holes of Detail S to 0.297" (total of 2 holes per side)

9-Weld D2744 Cap as per Dwg D2750 and QSI 004.Fill grooves in bend left from bending as per QSI 004

A/R: Aluminum Rod

12-Grind welds flush as per Dwg D2750

H 10/1/20

M112860 BFC 10/1/20  
H 10/1/21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 55496**

January 19, 2010 1:41:23 PM

Page 3

Item ID: D350-636-013

Accept

Setup Start

Revision ID:

Stop

Item Name: Skidtube LH

Start Date: 1/19/10 Start Qty: 1.00

Cust Item ID:

Required Date: 1/25/10 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: Date:

Tooling: Date:

Run Start

QC: Date:

SPC (Y/N): Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

13- scribe batch #.

K 10/1/21

120

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

130

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

1 K 10/1/21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 55496

January 19, 2010 1:41:23 PM

Page 4

Item ID: D350-636-013

Accept

Setup Start

Revision ID:

Stop

Item Name: Skidtube LH

Start Date: 1/19/10 Start Qty: 1.00

Required Date: 1/25/10 Req'd Qty: 1.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

150

QC3- Inspect Part Finish

0.00

QC

Memo

0.00

Quality Control

DP

10-1-21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**Work Order ID 55496**

January 19, 2010 1:41:23 PM

Page 5

Item ID: D350-636-013

Accept

Setup Start

Revision ID:

Stop

Item Name: Skidtube LH

Start Date: 1/19/10 Start Qty: 1.00

Cust Item ID:

Required Date: 1/25/10 Req'd Qty: 1.00

Customer:

Reference:

Run Start

Approvals: Process Plan:

Date:

Tooling:

Date:


QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160		0.00							
	Skidtubes								
Skidtubes	<b>Memo</b>	0.00							
Skidtubes	1-Open up holes section AW-AW 0.500" (4 per side) as per dwg D2750								
	2- Open holes section AV-AV 0.3125" (4 per side)								
	3-Open up holes of Detail T and ground handling to 0.625" (total of 8 holes per side) as per dwg D2750.								
	4-Chamfer holes of section AW-AW, AV-AV, T and ground handling. (welding instructions on sheet 10)								
	5-Deburr and blow out all chips from inside of tube. Prepare tube for welding, remove alodine as required.								
	6-Bond web D2739 in place as per QSI 015								
	A/R SikaFlex-291 batch: <u>M112795</u>								
	exp. date: <u>12/7/10</u>								
	7- Weld spacers D3490-1, D3490-5 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 10)								
	A/R Aluminum Rod batch: <u>M112860</u>								
	8-Grind welds flush as per Dwg D2750								
	9-Spot face ground handling holes (total of 4 places per side) as per dwg D2750								
	10-Deburr holes								

M 10/1/25

BE 10/01/26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 55496**

January 19, 2010 1:41:23 PM

Page 6

Item ID: D350-636-013

Accept

Setup Start

Revision ID:

Stop

Item Name: Skidtube LH

Start Date: 1/19/10 Start Qty: 1.00

Cust Item ID:

Required Date: 1/25/10 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start

QC: Date: SPC (Y/N): Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

170

QC10- Inspect visual per QSI004- ground welds

0.00

⇒ S 10/01/26

QC

Memo

0.00

Quality Control

180

QC5- Inspect part completeness to step on W/O

0.00

⇒ S 10/01/26

QC

Memo

0.00

Quality Control

190

Pressure Wash per QSI005 4.3

0.00

BR 10-02-9

①

HandFinish

Memo

0.00

Hand Finishing

RE-ALOWNE PAR 09-043 BK 10-02-10.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 55496

January 19, 2010 1:41:23 PM

Page 7

Item ID: D350-636-013

Accept

Revision ID:

Item Name: Skidtube LH

Start Date: 1/19/10 Start Qty: 1.00

Required Date: 1/25/10 Req'd Qty: 1.00

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

200

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Powder Coating

Memo

START TIME: 9:00AM  
OVEN TEMPERATURE: 320°F  
FINISH TIME: 9:30AM

0.00

=> 10/02/10

(X1)

Ø

210

QC3- Inspect Part Finish

0.00



QC

Quality Control

Memo

Inspect for foreign object per QSI 024

0.00

OK 10-02-11

Ø

Ø

220

HandFinishing

0.00



HandFinish

Hand Finishing

Memo

1-Install inserts as per dwg D2750

0.00

OK 10-02-11

Ø

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 55496

January 19, 2010 1:41:23 PM



Page 8

Item ID: D350-636-013

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube LH

Start Date: 1/19/10 Start Qty: 1.00



Cust Item ID:

Required Date: 1/25/10 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start



QC: Date: SPC (Y/N): Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230	HandFinishing	0.00							
	HandFinish								
Hand Finishing	Memo	0.00							
	1-Inspect for Foreign Objects								
	2-Spray inside of tube with "LPS-3" batch: <u>          </u>								
	3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750 SIKA FLEX 241 BATCH: <u>112345</u> EXP DATE: <u>10/08</u>								
	4-assemble o'ring to plug as per dwg D3492 and apply o'ring lube A/R 55-o'ring lube batch: <u>101223</u>								
	5-Coat all exposed fasteners with "LPS Procyon" batch: <u>104251</u>								
240	QC5- Inspect part completeness to step on W/O	0.00							
	QC								
Quality Control	Memo	0.00							

*Handwritten:* 10-02-11 D.

*Handwritten:* S 10/2/11

*Handwritten:* (H)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**Work Order ID 55496**

January 19, 2010 1:41:23 PM

Page 9

Item ID: D350-636-013

Accept

Revision ID:

Item Name: Skidtube LH

Start Date: 1/19/10 Start Qty: 1.00

Required Date: 1/25/10 Req'd Qty: 1.00

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

250

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

10-2-16 SP

260

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

8/10/02/17

(H)

270

Packaging

0.00



Packaging

Memo

0.00

Packaging

Package as per PPP D350-636-013

M.V.H

1/19/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 55496

January 19, 2010 1:41:23 PM



Page 10

Item ID: D350-636-013

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube LH

Start Date: 1/19/10 Start Qty: 1.00



Cust Item ID:

Required Date: 1/25/10 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

280

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/02/18

ME  
10-2-18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

January 19, 2010 1:41:27 PM

Page 1

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:H002.09.25 Rearranged procedure steps KJ  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev:J 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC  
 IPP Rev:K 08-09-23 revF as per dwg DD verified by:ec

Start Qty: 1.00

Required Qty: 1.00

D2600-3-BENT

Manufactured No

110

Each

13.0000

1.0000



Extrusion Bent

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

LG

5

50675

5

Main Warehouse

ST

8

43495

1

47133

1

52346

6

D3493-1

Manufactured No

110

Each

55.0000

2.0000



Washer

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

55

44902

2

47710

53

1 K 10/1/20  
 10-2-16 SP

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Page 2

January 19, 2010 1:41:27 PM

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev: H 102.09.25 Rearranged procedure steps ☐ KJ ☐  
IPP rev I 06.03.30 Per rev. D dwg EC  
IPP Rev: J 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC  
IPP Rev: K 08-09-23 rev F as per dwg DD verified by: ec

Start Qty: 1.00

Required Qty: 1.00

D2739 Manufactured No 160 Each 8.0000 1.0000



350 I Beam

Warehouse Loc Qty Loc Code

Location

Main Warehouse

B 5556 9

2

W 10/1/25

ST

8

47124

1

53900

3

55034

4

D2744 Manufactured No 160 Each 57.0000 1.0000



Cap

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

57

44892

1

47488

23

51922

33

1

W 10/1/20

January 19, 2010 1:41:27 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

January 19, 2010 1:41:27 PM

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:H[02.09.25]Rearranged procedure steps KJ  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev:J 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC  
 IPP Rev:K 08-09-23 revF as per dwg DD verified by:ec

Start Qty: 1.00

Required Qty: 1.00

D3490-1 Manufactured No 160 Each 60.0000 4.0000



Cross Bolt Spacer

Warehouse Loc Qty Loc Code  
Location

Main Warehouse

ST	60
45338	2
47657	2
48277	16
51932	40

3 BE 10/01/26

D3490-5 Manufactured No 160 Each 63.0000 4.0000



Cross Bolt Spacer

Warehouse Loc Qty Loc Code  
Location

Main Warehouse

ST	63
43015	22
46490	41

4 BE 10/01/26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

January 19, 2010 1:41:27 PM

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:H 02.09.25 Rearranged procedure steps KJ  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev:J 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC  
 IPP Rev:K 08-09-23 revF as per dwg DD verified by:ec

Start Qty: 1.00

Required Qty: 1.00

D2743 Manufactured No 220 Each 243.0000 8.0000



Crossbolt Spacer

Warehouse Loc Qty Loc Code

Location

Main Warehouse

LG 52

50281 50

51913 2

Main Warehouse

ST 191

44891 2

45555 17

48275 1

52310 171

8 BE 10/01/26

ALS4-1032-225 Purchased No

230 Each 6,686.000 38.0000



Insert

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 6686

107441 16

110768 ✓ 6670

38, DR 10-02-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Page 5

January 19, 2010 1:41:27 PM

Work Order ID: 55496

Parent Item: D350-636-013

Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev: H 02.09.25 Rearranged procedure steps KJ  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev: J 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC  
 IPP Rev: K 08-09-23 rev F as per dwg DD verified by: ec

Start Qty: 1.00

Required Qty: 1.00

AN3C5A Purchased No 230 Each 909.0000 34.0000



Bolt

Warehouse Loc Qty Loc Code  
Location

Main Warehouse

ST	909
111424	8
111707	69
112314	1
113121	231
113149 ✓	300
113644 ✓	300

26 BR 10-02-11  
 8 BR 10-02-11

AN3C6A Purchased No 230 Each 804.0000 4.0000



BOLT

Warehouse Loc Qty Loc Code  
Location

Main Warehouse

ST	804
111982 ✓	804

4 BR 10-02-11

\* WAS 1515H3L  
 WASHER.

111819

④

4. BR 10-2-11

January 19, 2010 1:41:27 PM

Shop Packet Print

Page 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

January 19, 2010 1:41:27 PM

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:H:02.09.25 Rearranged procedure steps KJ  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev:J 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC  
 IPP Rev:K 08-09-23 revF as per dwg DD verified by:ec

Start Qty: 1.00

Required Qty: 1.00

AN6C44A Purchased No 230 Each 148.0000 4.0000



BOLT

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
OFFSHORE		
FG	2	
103964	2	
Main Warehouse		
ST	146	
110105	4	
110155	14	
110665	1	
111605 ✓	50	
111649	50	
112720	9	
113121	18	

4 BR 10-02-11

AN8C35A Purchased No 230 Each 137.0000 1.0000



BOLT

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	137	
102180	1	
106896	1	
110105 ✓	48	
110847	87	

1 BR 10-02-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

January 19, 2010 1:41:27 PM

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:H 02.09.25 Rearranged procedure steps KJ  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev:J 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC  
 IPP Rev:K 08-09-23 revF as per dwg DD verified by:ec

Start Qty: 1.00

Required Qty: 1.00

AN960C10L Purchased No 230 Each 388.0000 38.0000



washer

NAS1149C0332R

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
OFFSHORE	113288	
FG	100	
103585	100	
Main Warehouse		
ST	288	
112116	128	
112612	160	

38. BR 10-02-11

AN960C816L Purchased No 230 Each 240.0000 1.0000



WASHER

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	240	
104093	2	
107520	4	
110139	29	
110584	100	
111424 ✓	105	

1 BR 10-02-11.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

January 19, 2010 1:41:27 PM

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:H02.09.25 Rearranged procedure steps KJ  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev:J 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC  
 IPP Rev:K 08-09-23 revF as per dwg DD verified by:ec

Start Qty: 1.00

Required Qty: 1.00

D2745 Manufactured No 230 Each 346.0000 8.0000



Bushing

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 36

43754 2

44893 33

45556 1

Main Warehouse

ST023 23

34817 2

36230 8

37303 1

39587 2

40726 2

41114 2

42778 6

Main Warehouse

ST46 287

51537 70

51910 36

52311 181

8/10-02-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

January 19, 2010 1:41:27 PM

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:H 02.09.25 Rearranged procedure steps KJ  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev:J 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC  
 IPP Rev:K 08-09-23 revF as per dwg DD verified by:ec

Start Qty: 1.00

Required Qty: 1.00

D3488-041 Manufactured No 230 Each 14.0000 1.0000



Blade Fitting Assembly, LH

Warehouse Loc Qty Loc Code  
Location

Main Warehouse

ST

14

47348 ✓

14

D3492-041 Manufactured No 230 Each 76.0000 8.0000



Plug Assembly

Warehouse Loc Qty Loc Code  
Location

Main Warehouse

ST

76

51584 ✓

76

D3492-045 Manufactured No 230 Each 82.0000 8.0000



Plug Assembly

Warehouse Loc Qty Loc Code  
Location

Main Warehouse

ST

82

51638 ✓

82

1 PR 10-02-11

8 PR 10-02-11

8 PR 10-02-11

\* PTO

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10-02-11	230	ADD NAS1611-005 B.106099 O'Ring (For 3492-45) (IT NOT ON WORKORDER B51638 Plugs) <u>SEQUENCE 230</u>	BK	10-02-11	8.		S. 10/6/11
<del>10-02-11</del>	<del>230</del>	<del>ADD NAS</del>					

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

January 19, 2010 1:41:27 PM

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:H 02.09.25 Rearranged procedure steps KJ  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev:J 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC  
 IPP Rev:K 08-09-23 revF as per dwg DD verified by:ec

Start Qty: 1.00

Required Qty: 1.00

D3535-25 Manufactured No 230 Each 15.0000 1.0000



Wearshoe

Warehouse Loc Qty Loc Code  
Location

Main Warehouse

FP 7

51927 7

Main Warehouse

ST 8

52589 8

D3536-25 Manufactured No 230 Each 40.0000 1.0000



Gasket

Warehouse Loc Qty Loc Code  
Location

Main Warehouse

FP10 35

51607 9

54479 26

Main Warehouse

ST 5

45569 1

47011 2

47526 2

1 Bl 10-02-11

1 Bl 10-02-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

January 19, 2010 1:41:27 PM

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:H 02.09.25 Rearranged procedure steps KJ  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev:J 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC  
 IPP Rev:K 08-09-23 revF as per dwg DD verified by:ec

Start Qty: 1.00

Required Qty: 1.00

D3537-1 Manufactured No 230 Each 141.0000 3.0000



Wearpad

Warehouse	Loc Qty	Loc Code
<u>Location</u>		
Main Warehouse		
FP	2	
48288	2	
Main Warehouse		
FP17	139	
51678	34	
51679 ✓	105	

3 BR 10-02-11

D3631-1 Manufactured No 230 Each 442.0000 8.0000



Washer

Warehouse	Loc Qty	Loc Code
<u>Location</u>		
Main Warehouse		
ST	442	
52693 ✓	142	
54388	300	

8 BR 10-02-11.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

January 19, 2010 1:41:27 PM

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:H 02.09.25 Rearranged procedure steps KJ  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev:J 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC  
 IPP Rev:K 08-09-23 revF as per dwg DD verified by:ec

Start Qty: 1.00

Required Qty: 1.00

D3791-1 Manufactured No 230 Each 11.0000 1.0000



Wearplate

Warehouse Loc Qty Loc Code  
Location

Main Warehouse

FP 7

51610 7

Main Warehouse

ST 4

51909 ✓ 4

D3793-1 Manufactured No 230 Each 19.0000 1.0000



Wearshoe

Warehouse Loc Qty Loc Code  
Location

Main Warehouse

ST 19

40551 ✓ 1

51597 ✓ 16

51906 2

1 BL 10-02-11

1 BL 10-02-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

January 19, 2010 1:41:27 PM

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev: H 02.09.25 Rearranged procedure steps KJ  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev: J 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC  
 IPP Rev: K 08-09-23 rev F as per dwg DD verified by: ec

Start Qty: 1.00

Required Qty: 1.00

D3793-3 Manufactured No 230 Each 16.0000 1.0000



Wearshoe

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
ST	16	
51592 ✓	12	
51903	4	

1 PR 10-02-11

D3794-1 Manufactured No 230 Each 15.0000 1.0000



Gasket

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
FP	12	
51928 ✓	12	
Main Warehouse		
ST	3	
46530	1	
47212	2	

1 PR 10-02-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

January 19, 2010 1:41:27 PM

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:HL02.09.25 Rearranged procedure steps[] KJ[]  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev:J 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC  
 IPP Rev:K 08-09-23 revF as per dwg DD verified by:ec

Start Qty: 1.00

Required Qty: 1.00

D3794-3 Manufactured No 230 Each 21.0000 1.0000



Gasket

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP 18

51598 6

51907 12

Main Warehouse

ST 3

46531 2

47440 1

1 Bk 10-02-11

MS21043-6 Purchased No 230 Each 1,000.000 4.0000



NUT

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 1000

111424 8

112314 992

4. Bk 10-02-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

January 19, 2010 1:41:27 PM

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:H 02.09.25 Rearranged procedure steps: J KJ  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev:J 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC  
 IPP Rev:K 08-09-23 revF as per dwg DD verified by:ec

Start Qty: 1.00

Required Qty: 1.00

MS21083C8 Purchased No 230 Each 53.0000 1.0000



NUT

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 53

110584 5

111424 2

112492 6

113149 40

NAS1611-010 Purchased No 230 Each 330.0000 1.0000



O-RING

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 330

110715 44

110915 286

~~NAS1611-010~~  
~~BAEH 10-02-11~~

1 B2 10-02-11.

PTO

8

W/O: 55496		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10-02-11	280.	REPLACE NAS1611-010 FOR D2594-3 ORING 3.52562	BK	10-02-11	8		S 10/02/11

Part No: D350-636-013 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

January 19, 2010 1:41:27 PM

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:H 102.09.25 Rearranged procedure steps KJ  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev:J 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC  
 IPP Rev:K 08-09-23 revF as per dwg DD verified by:ec

Start Qty: 1.00

Required Qty: 1.00

AN8C21A

Purchased

No

260

Each

148.0000

2.0000



BOLT



10-2-16

5

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

148

105160

1

107596

1

107924

2

109092

2

110341

2

110342

2

111605

50

112720

38

113558

50

2

AN960C816L

Purchased

No

260

Each

240.0000

2.0000



WASHER



10-2-16

5

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

240

104093

2

107520

4

110139

29

110584

100

111424

105

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

January 19, 2010 1:41:27 PM

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:H 02.09.25 Rearranged procedure steps KJ  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev:J 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC  
 IPP Rev:K 08-09-23 revF as per dwg DD verified by:ec

Start Qty: 1.00

Required Qty: 1.00

D2741 Manufactured No 260 Each 45.0000 1.0000



Blade, 350 Skidtube

10-2-16 SP

Warehouse Loc Qty Loc Code  
Location

Main Warehouse

ST 45

45320 1

47113 4

51931 40

D3672-1 Manufactured No 260 Each 1,744.000 4.0000



Phenolic Washer

10-2-16 SP

Warehouse Loc Qty Loc Code  
Location

Main Warehouse

ST 1244

39275 19

42329 5

47628 220

52505 1000

Main Warehouse

ST117 500

51674 500

?

4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

January 19, 2010 1:41:27 PM

Work Order ID: 55496



Parent Item: D350-636-013



Parent Item Name: Skidtube LH

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev: H 02.09.25 Rearranged procedure steps KJ  
 IPP rev I 06.03.30 Per rev. D dwg EC  
 IPP Rev: J 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC  
 IPP Rev: K 08-09-23 revF as per dwg DD verified by: ec

Start Qty: 1.00

Required Qty: 1.00

D3672-13 Purchased No 260 Each 948.0000 2.0000



Phenolic Washer

10-2-16 sf

Warehouse  
Location

Main Warehouse

ST 948  
 54363 948

2

MS21083C8 Purchased No 260 Each 53.0000 2.0000



NUT

10-2-16 sf (14)

Warehouse  
Location

Main Warehouse

ST 53  
 110584 5  
 111424 2  
 112492 6  
 113149 40

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



8 7 6 5 4 3 2 1

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-5	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

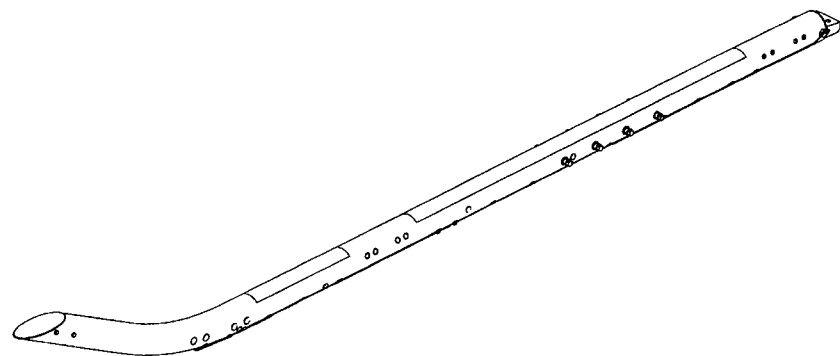
# GENERAL NOTES:

- MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH:  
ACID ETCH, ALONDE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.  
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- WELD PER DART QSI 004
- INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES ( $\phi 0.297$ ) FOR WEARSHOE INSERTS
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:  
MINIMUM YIELD TENSILE STRENGTH = 35 KSI  
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS.  
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF  
POWDER COATING WITH MEK DEGREASER.
- SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

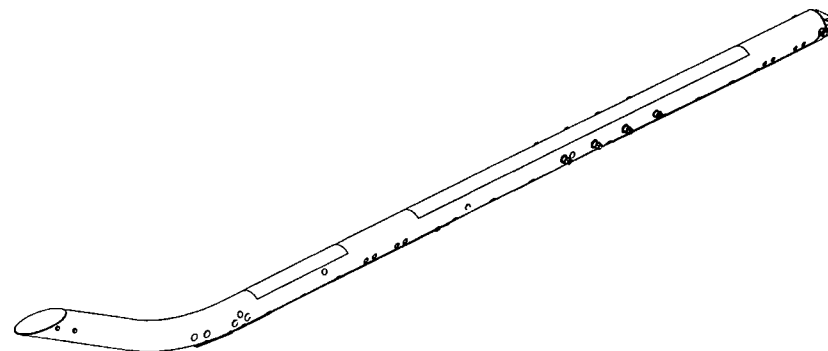
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 554926  
BT 10-1-19

RELEASED

F	INCORPORATE DSI 9413; QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/-3 REPLACES D3535-13/-35 (ZN C8-1); D3794-1/-3 REPLACES D3536-13/-35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARSHOE HOLES UNDER FWD/AFT SADDLE REMOVED (8 PL). WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/-042 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A6-1); REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS, CHANGE INSERTS; ADD D3631-1; REMOVE QTY (38) NAS1515H3L; REMOVE QTY (10) NAS1515H8L; REMOVE D2741, QTY (2) AN960C816; REMOVE QTY (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEO 9133/9157	PH	06.01.05
C	ADD D2750-3/D2750-4; INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24694-S293 TO AN8-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.07.16		
DART AEROSPACE USA, INC. PORT HADLOCK, WA			
DRAWING NO. D2750		REV. F SHEET 1 OF 11	
TITLE 350 SKIDTUBE ASSEMBLY		SCALE NTS	
COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			



D2750-041 350 SKIDTUBE ASSEMBLY, LH

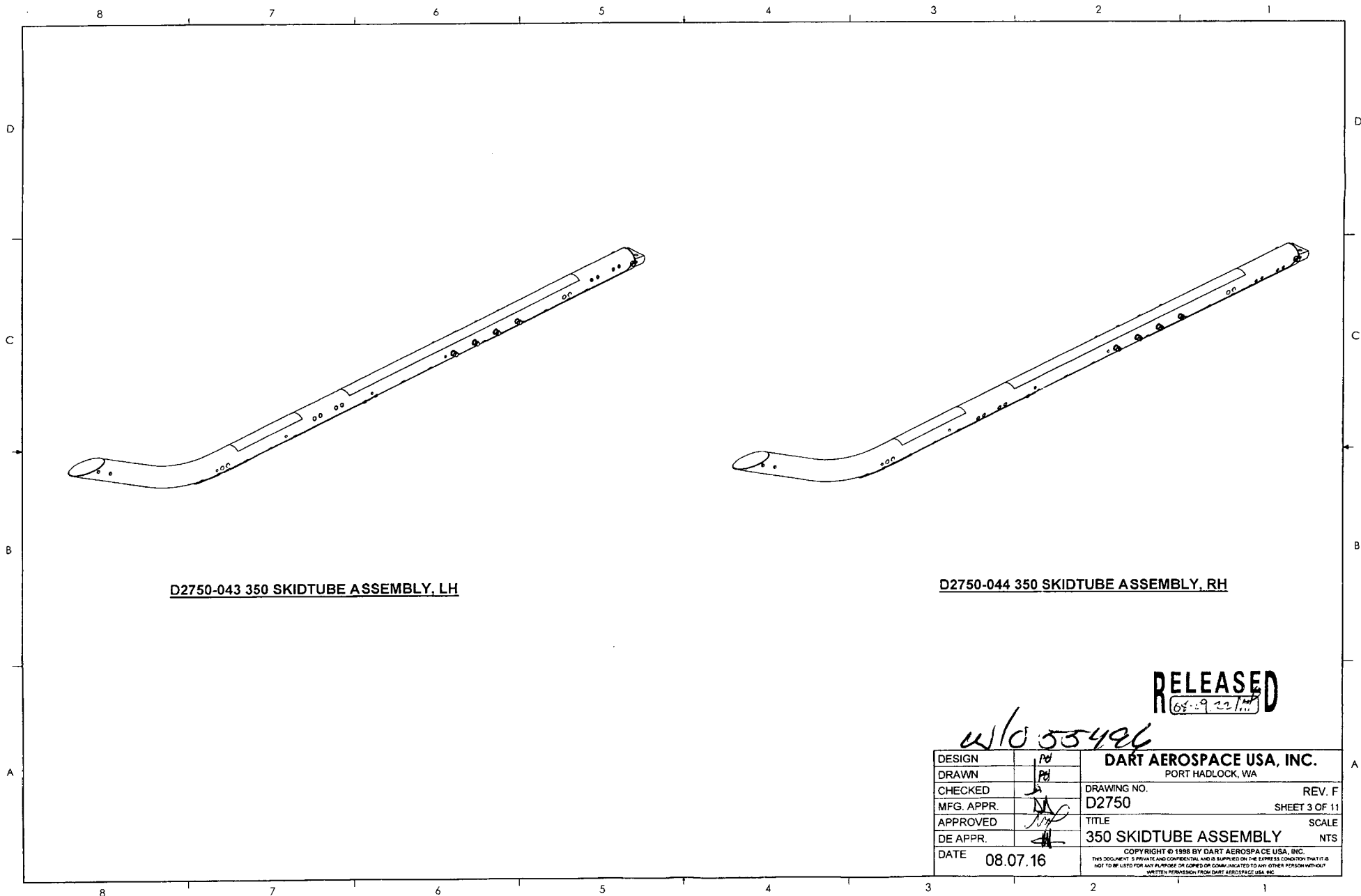


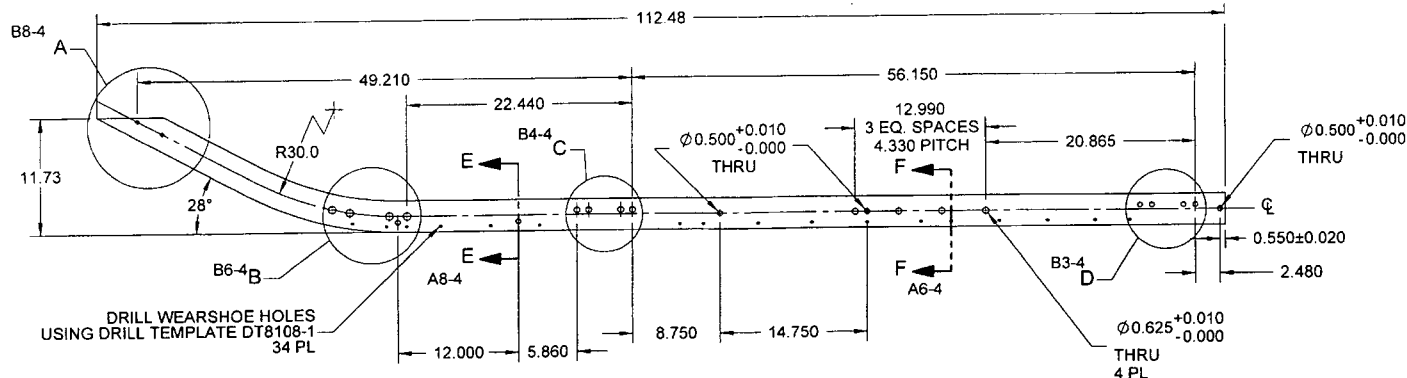
D2750-042 350 SKIDTUBE ASSEMBLY, RH

**RELEASED**  
08.22.14

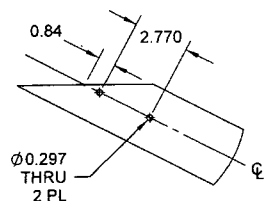
*W/O 35496*

DESIGN	PM	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	AM	PORT HADLOCK, WA	
CHECKED	SA	DRAWING NO. D2750	REV. F
MFG. APPR.	SA	SHEET 2 OF 11	
APPROVED	MM	TITLE	SCALE
DE APPR.	SA	350 SKIDTUBE ASSEMBLY NTS	
DATE	08.07.16	<small>COPYRIGHT © 1988 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

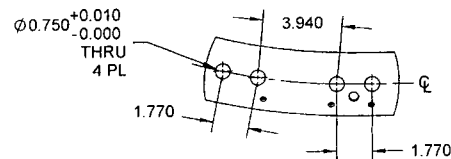




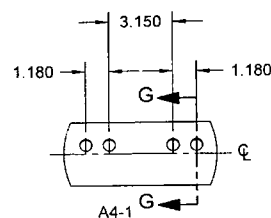
**D2750-1 LH SKIDTUBE**



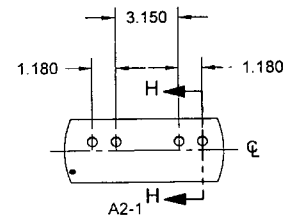
**DETAIL A**  
SCALE 2X



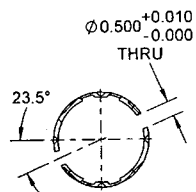
**DETAIL B**  
SCALE 2X



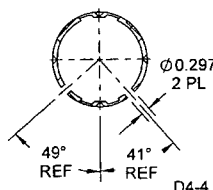
**DETAIL C**  
SCALE 2X



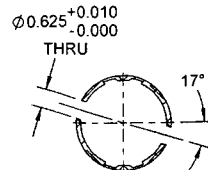
**DETAIL D**  
SCALE 2X



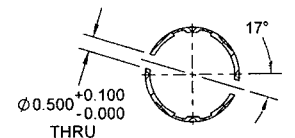
**SECTION E-E**  
SCALE 3X, 2 PL



**SECTION F-F**  
SCALE 3X, 17 PL



**SECTION G-G**  
SCALE 3X, 4 PL

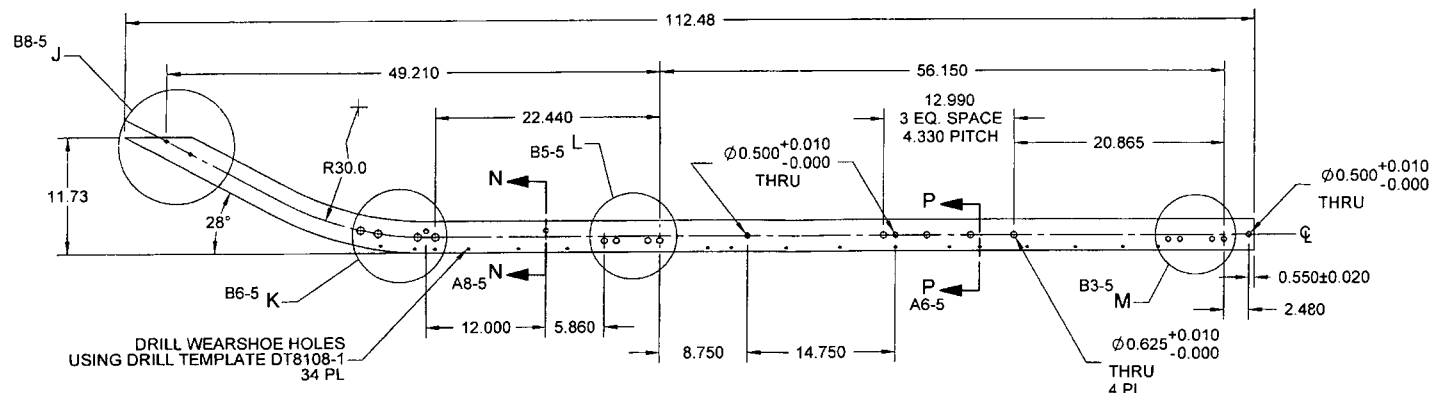


**SECTION H-H**  
SCALE 3X, 4 PL

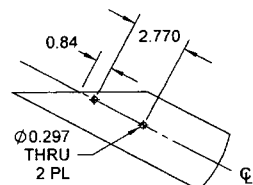
**RELEASED**

W10 55496

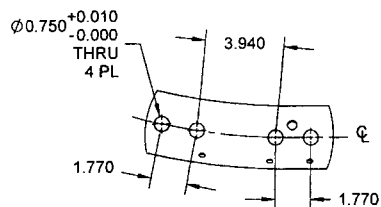
DESIGN	PA	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	PA	PORT HADLOCK, WA	
CHECKED		DRAWING NO. <b>D2750</b>	REV. F
MFG. APPR.		SHEET 4 OF 11	
APPROVED		TITLE	SCALE
DE APPR.		<b>350 SKIDTUBE ASSEMBLY</b>	NTS
DATE	<b>08.07.16</b>	<small>COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	



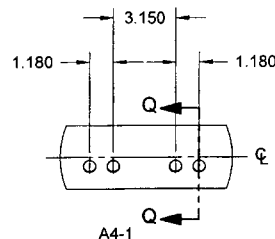
**D2750-2 RH SKIDTUBE**



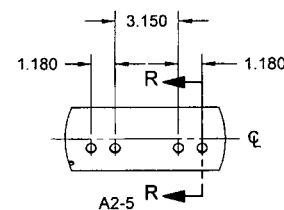
**DETAIL J**  
SCALE 2X



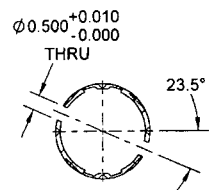
**DETAIL K**  
SCALE 2X



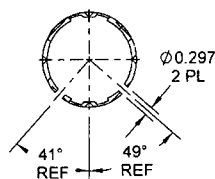
**DETAIL L**  
SCALE 2X



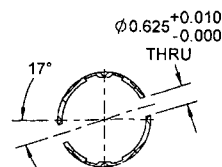
**DETAIL M**  
SCALE 2X



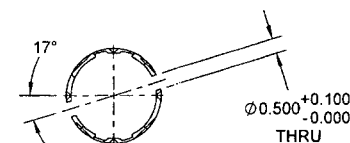
**SECTION N-N**  
SCALE 3X, 2 PL



**SECTION P-P**  
SCALE 3X, 17 PL



**SECTION Q-Q**  
SCALE 3X, 4 PL



**SECTION R-R**  
SCALE 3X, 4 PL

**RELEASED**

DESIGN	PE	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	PE	PORT HADLOCK, WA	
CHECKED		DRAWING NO. <b>D2750</b>	REV. F
MFG. APPR.			SHEET 5 OF 11
APPROVED		TITLE <b>350 SKIDTUBE ASSEMBLY</b>	SCALE
DE APPR.			NTS
DATE	<b>08.07.16</b>	<small>COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMPILED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

8

7

6

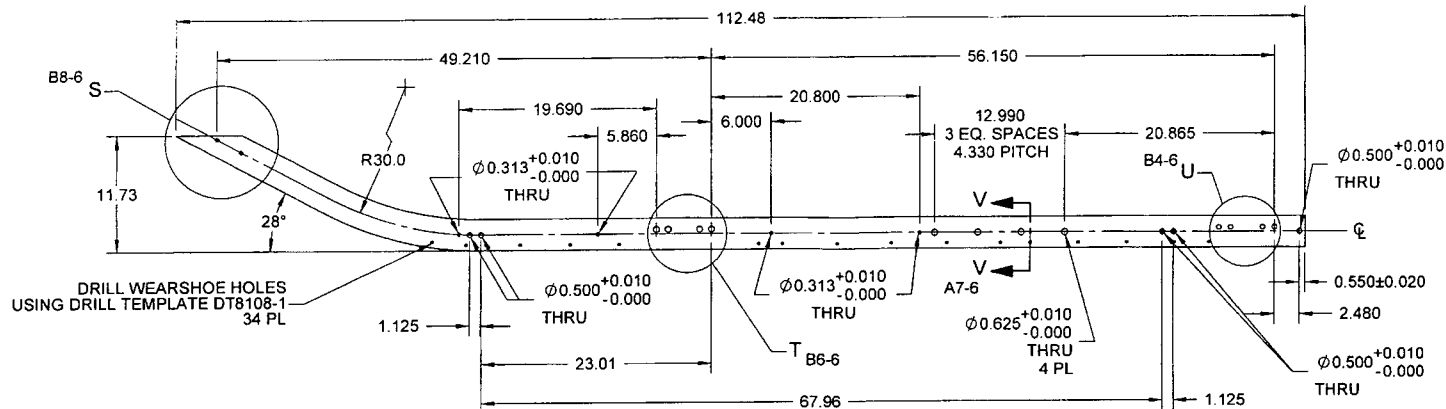
5

4

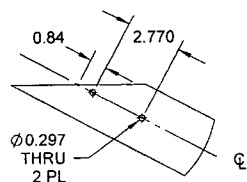
3

2

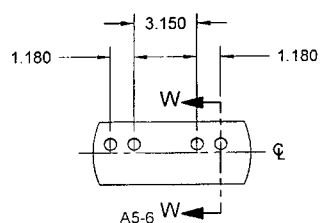
1



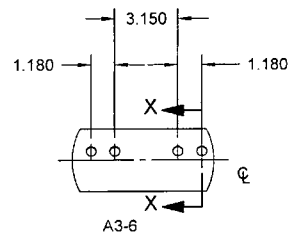
**D2750-3 LH SKIDTUBE**



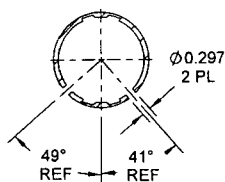
**DETAIL S**  
SCALE 2X



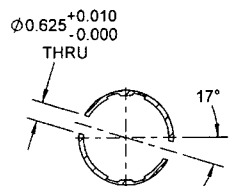
**DETAIL T**  
SCALE 2X



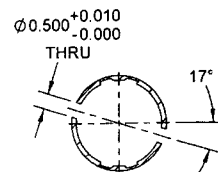
**DETAIL U**  
SCALE 2X



**SECTION V-V**  
SCALE 3X, 17 PL



**SECTION W-W**  
SCALE 3X, 4 PL



**SECTION X-X**  
SCALE 3X, 4 PL

**RELEASED**

DESIGN		<b>DART AEROSPACE USA, INC.</b>
DRAWN		PORT HADLOCK, WA
CHECKED		DRAWING NO. <b>D2750</b>
MFG. APPR.		REV. F
APPROVED		SHEET 6 OF 11
DE APPR.		TITLE <b>350 SKIDTUBE ASSEMBLY</b>
DATE	<b>08.07.16</b>	SCALE <b>NTS</b>
COPYRIGHT © 1988 BY DART AEROSPACE USA, INC.		
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.		

8

7

6

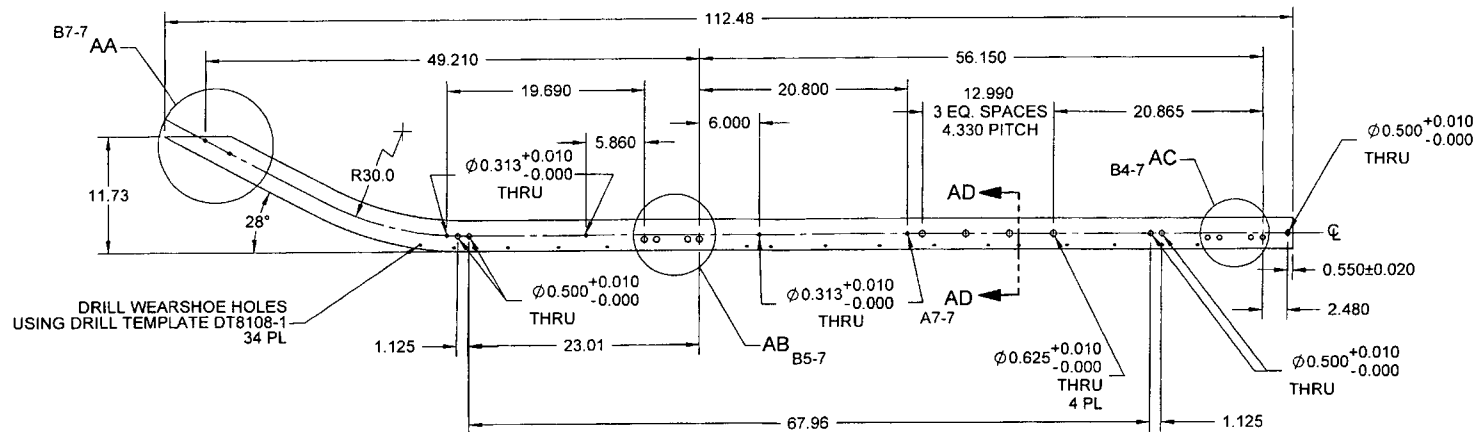
5

4

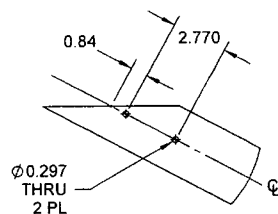
3

2

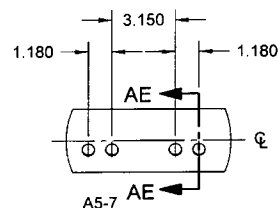
1



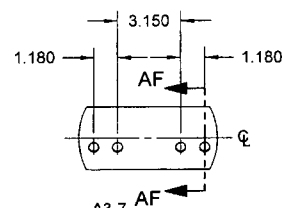
**D2750-4 RH SKIDTUBE**



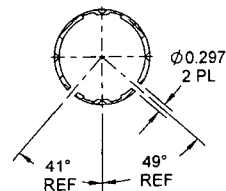
**DETAIL AA**  
SCALE 2X



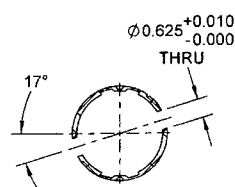
**DETAIL AB**  
SCALE 2X



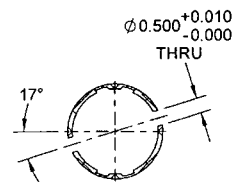
**DETAIL AC**  
SCALE 2X



**SECTION AD-AD**  
SCALE 3X, 17 PL



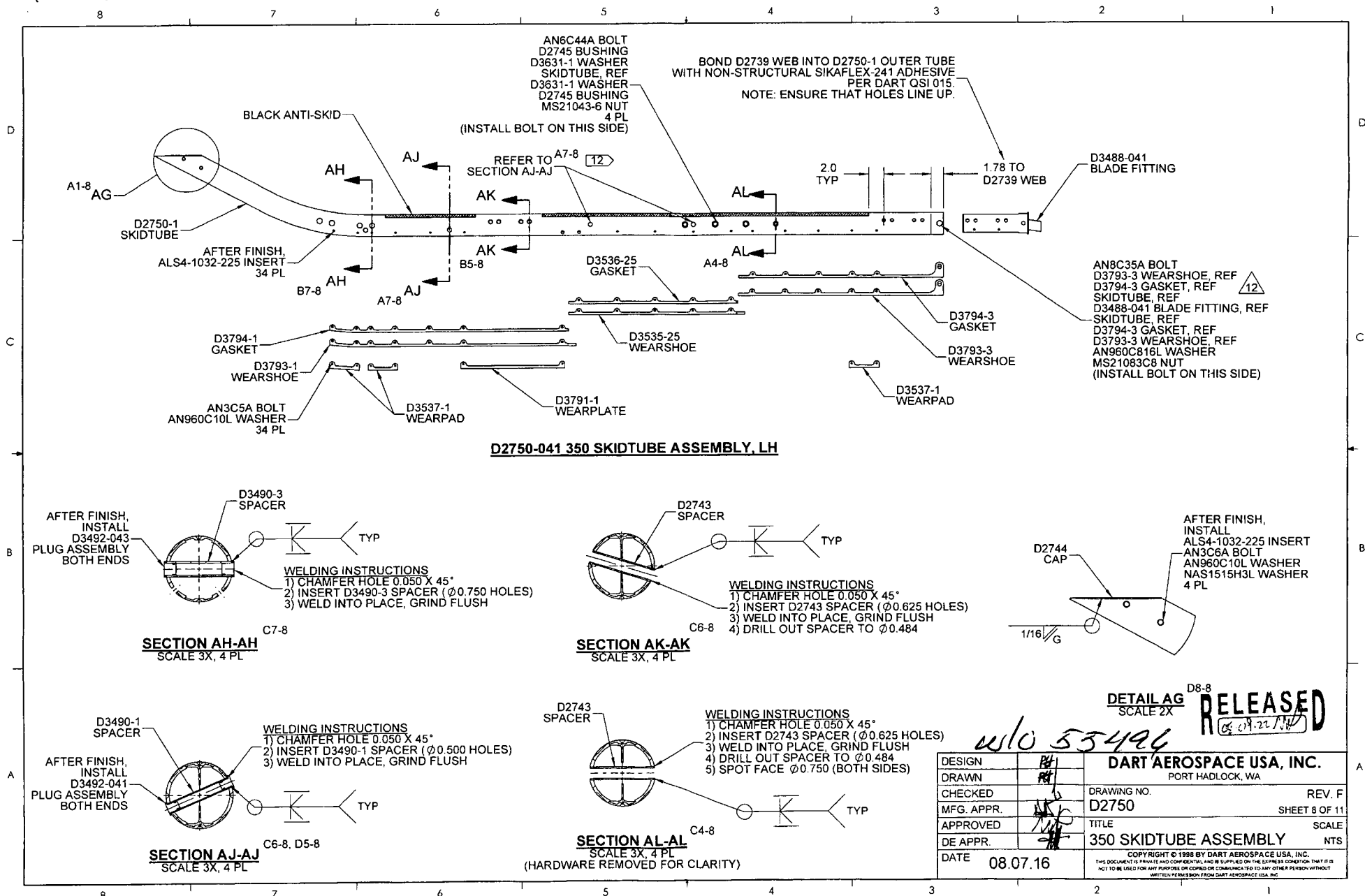
**SECTION AE-AE**  
SCALE 3X, 4 PL



**SECTION AF-AF**  
SCALE 3X, 4 PL

**RELEASED**  
08-09-22-110

DESIGN	PA	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	PA	PORT HADLOCK, WA	
CHECKED	PA	DRAWING NO.	REV. F
MFG. APPR.	PA	D2750	SHEET 7 OF 11
APPROVED	PA	TITLE	SCALE
DE APPR.	PA	<b>350 SKIDTUBE ASSEMBLY</b>	
DATE	08.07.16	COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	





8

7

6

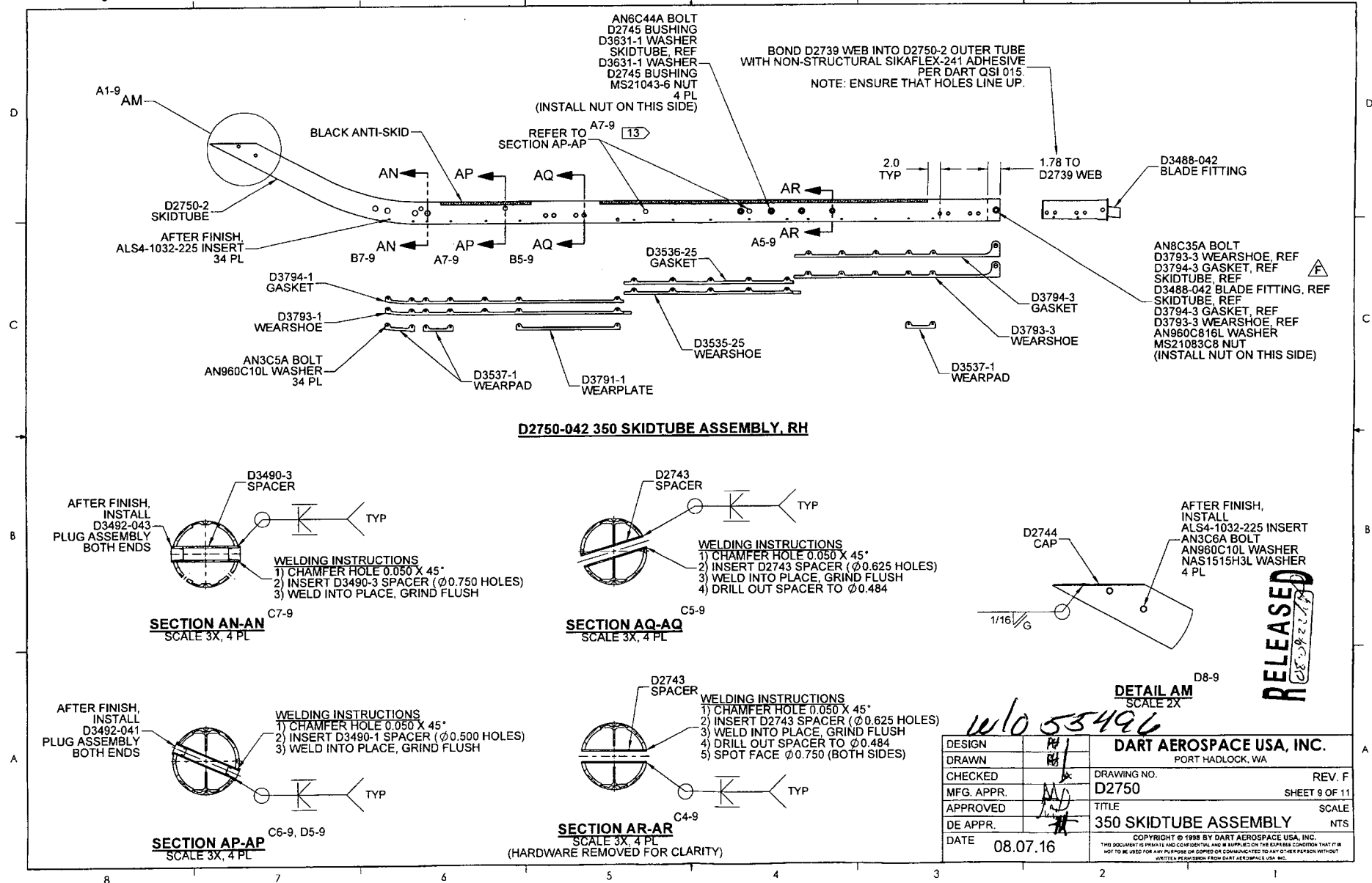
5

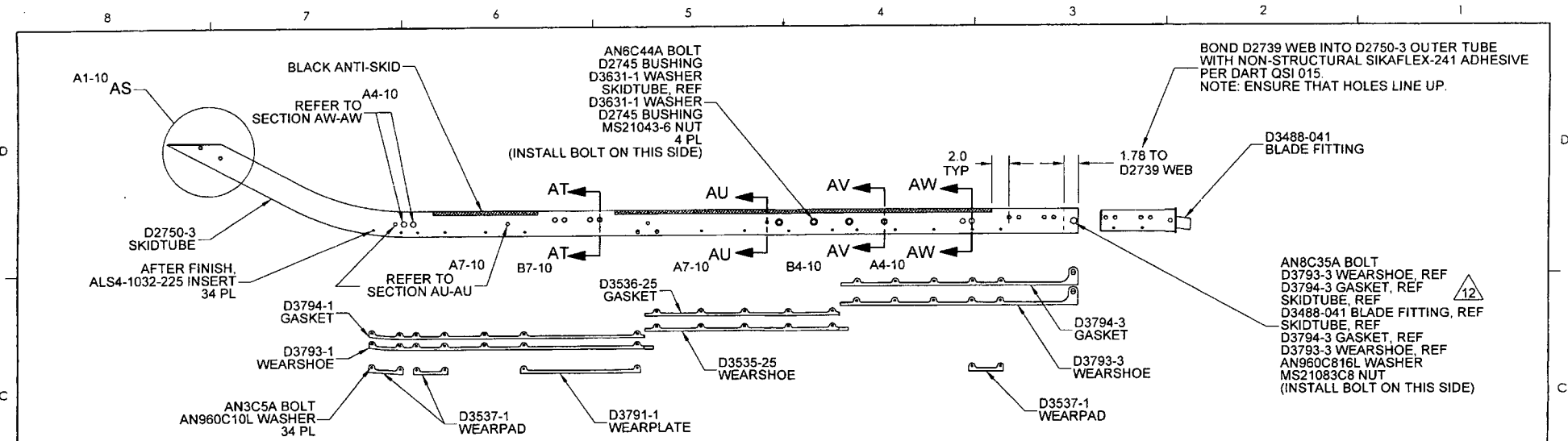
4

3

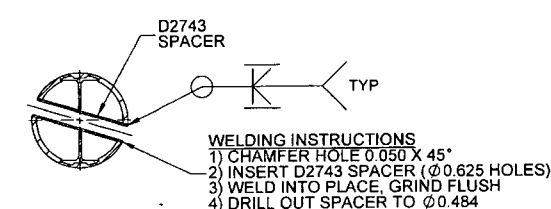
2

1

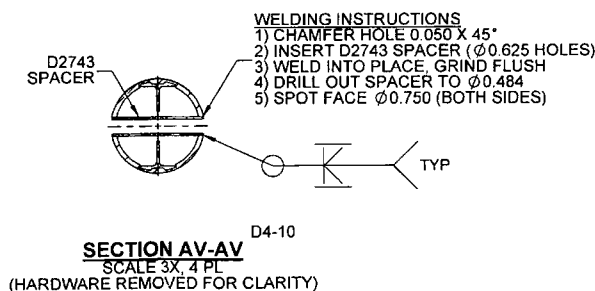




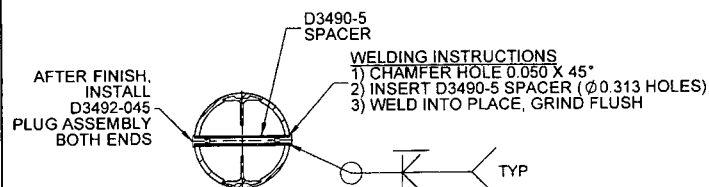
### D2750-043 350 SKIDTUBE ASSEMBLY, LH



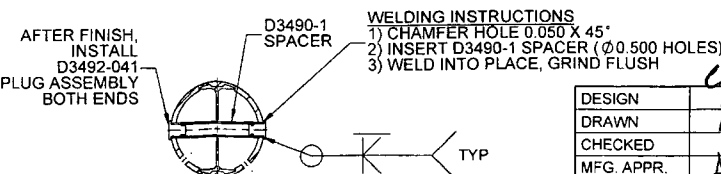
**SECTION AT-AT**  
SCALE 3X, 4 PL



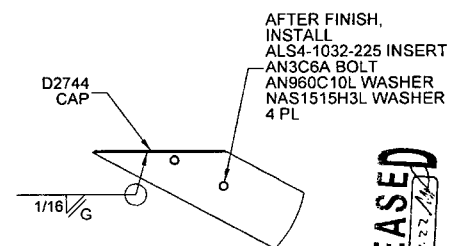
**SECTION AV-AV**  
SCALE 3X, 4 PL  
(HARDWARE REMOVED FOR CLARITY)



**SECTION AU-AU**  
SCALE 3X, 4 PL



**SECTION AW-AW**  
SCALE 3X, 4 PL



**DETAIL AS**  
SCALE 2X

DESIGN	10	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	10	PORT HADLOCK, WA	
CHECKED	10	DRAWING NO.	REV. F
MFG. APPR.	10	D2750	SHEET 10 OF 11
APPROVED	10	TITLE	SCALE
DE APPR.	10	350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	COPYRIGHT © 1988 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

RELEASED  
2018-08-22/10/10

W/055496



NO. 222

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job number: 54986  
Part number: D350-636 012  
Description: 350 skid tube  
Welding Process: Tig[☒] Mig[ ]  
Base material: Aluminium  
Current: AC[☒] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[ ]  
Penetration: pass[☒] fail[ ]

UNACCEPTABLE

Cracks: pass[☒] fail[ ]  
Undercut: pass[☒] fail[ ]  
Pin holes: pass[☒] fail[ ]  
Overlap (cold lap): pass[☒] fail[ ]  
Porosity (surface): pass[☒] fail[ ]  
Coloration: pass[☒] fail[ ]

Qualifier [Signature] Date of Test Coupon 10.01.11

Welder Barclay Elliott Date of Test Coupon 10-01-11

The above named individual is qualified in accordance with AWS D17.1.2001 to weld